

ABBREVIATED EXPLANATION

Approximate stratigraphic relationships only; see Geologic Map Explanation for more accurate stratigraphic relationships and unit descriptions.

SEDIMENTARY AND METASEDIMENTARY ROCKS

VOLCANIC AND METAVOLCANIC ROCKS

CENOZOIC	QUATERNARY		Alluvium		
			Mine and dredge tailings		
			Levee and channel deposits		
			Basin deposits ( <i>Alluvium</i> )		
			Intertidal deposits ( <i>Peaty mud</i> )		
			Dune sand		
			Lake deposits		
			Older alluvium		
			Glacial deposits		
			Modesto Formation ( <i>Alluvium</i> )		Upper and lower members
			Riverbank Formation ( <i>Alluvium</i> )		
			Modesto-Riverbank Formations ( <i>Arkosic alluvium</i> )		
			Montezuma Formation ( <i>Poorly consolidated, clayey sand</i> )		
			Turlock Lake Formation ( <i>Sand, silt, and gravel</i> )		Basalt
			Red Bluff Formation ( <i>Gravel in reddish, silty or sandy matrix</i> )		
			North Merced Gravel ( <i>Thin pediment veneer</i> )		
MESOZOIC	TERTIARY		Tehama Formation ( <i>Sand, silt, and volcaniclastic rocks</i> )		Lawlor Tuff
			Laguna Formation ( <i>Consolidated alluvial deposits</i> )		Dacite, rhyodacite domes
			San Pablo Group ( <i>Marine sandstone and shale</i> )		Eureka Valley Tuff
			Mehrten Formation ( <i>Andesitic conglomerate, sandstone, and breccia</i> )		Table Mountain Latite
			Valley Springs Formation ( <i>Rhyolitic tuff and sedimentary rocks</i> )		Putnam Peak Basalt
			Markley Sandstone ( <i>Marine</i> )		
			Nortonville Shale ( <i>Marine</i> )		
			Domengine Sandstone ( <i>Marine</i> )		
			Capay Formation ( <i>Marine sandstone</i> )		
			"Auriferous" Gravels		
			Ione Formation ( <i>Quartzose sandstone and kaolinitic clay</i> )		
			Martinez Formation ( <i>Marine quartzose sandstone</i> )		
	CRETACEOUS		Guinda Formation ( <i>Marine sandstone</i> )		
			Chico Formation ( <i>Marine sandstone, shale, and conglomerate</i> )		
	JURASSIC		Salt Springs Slate		Copper Hill Volcanics
			Mariposa Formation ( <i>Slate, graywacke, and conglomerate</i> )		Brower Creek Volcanics
					Gopher Ridge Volcanics
					Logtown Ridge Formation
			Sailor Canyon Formation ( <i>Metasedimentary rocks</i> )		Jurassic metavolcanic rocks
PALEOZOIC			Metasedimentary rocks*		Paleozoic-Mesozoic metamorphic rocks
			Crystalline limestone and dolomite*		Augen gneiss of uncertain age
			Calaveras Complex ( <i>Metasedimentary rocks</i> )		Undifferentiated Paleozoic(?) rocks
					Calaveras Complex volcanic rocks

PLUTONIC ROCKS

MESOZOIC		Mesozoic granitic rocks
		Mesozoic dioritic rocks
		Gabbroic rocks*
		Ultramafic rocks*

\*Horizontal line pattern denotes melange terrane.

MAP SYMBOLS

	Contact
(Observed or approximately located; queried where gradational or inferred.)	
	Fault
(Solid where well located; dashed where approximately located or inferred; dotted where concealed by younger rocks or water; queried where continuation or existence is uncertain. U, upthrown side; D, downthrown side, relative or apparent.)	
	Anticlinal fold
(Dotted where concealed by younger rocks or water.)	
	Synclinal fold
(Dotted where concealed by younger rocks or water.)	
	Overturned fold
	Strike and dip of beds
(General strike and dip of stratified rocks.)	
	Strike and dip of foliation
(General strike and dip of foliation in metamorphic rocks.)	
	Joints
(Prominent joints in granitic and metamorphic rocks of the high Sierra.)	